

Hazardous Substances Advisory Committee

Minutes of 26th meeting: 9 July 2020

1. Welcome and approval of the draft agenda

- 1.1 The Chair, Professor Chris Collins, welcomed all attendees to the meeting (see annex A).
- 1.2 The draft agenda was approved with no additional items added under any other business.

2. Post-2020 Biodiversity and Pollution Targets (closed item).

- 2.1 Kasia Nikraszewicz (Defra) provided a background to the document.
- 2.2 HSAC are drafting a policy document on the Post-2020 Global Biodiversity Framework, which will set an international target to reduce pollution. At present, this is policy in development and will be shared in due course.

3. UKRI Funding for Chemicals Research

- 3.1 Tessa Edgecombe (NERC) introduced UKRI funding mechanisms and highlighted the need for multi/interdisciplinary research which is strongly aligned with government priorities.
- 3.2 Chris Green (Defra) presented a proposal for a UKRI research programme on an “Interdisciplinary Systems Approach to Risk Management of Chemicals” and requested feedback from the committee. The proposal will be taken forward to Defra and UKRI approval processes.
- 3.3 The committee supported the proposal and agreed to provide a supplementary letter of support.
- 3.3 The committee suggested several improvements on the proposal including:
 - Highlighting “inter-disciplinarity” and looking across the range of natural sciences, natural sciences and humanities with an even distribution contributing at all stages.
 - Linking this call to other funded research programmes such as the Industrial Strategy Challenge Fund on Smart Sustainable Plastic Packaging, looking at; resource flows that affect the UK; cutting emissions and leakage into the environment; intensification in methods when assessing chemicals and; how to assess the improvements that new methods was made. It was also highlighted to factor in life cycle assessment within novel green initiatives

- Creating a stronger link to the OECD, highlight opportunities for research to have international impact, highlight the innovative aspects of the proposed work, and include a section on horizon scanning including public perception of chemicals.
- Focussing on the intensification of methods that are already being implemented to assess chemicals, and to focus on how to assess new methods being used to assess if novel techniques have truly worked.

Action: For HSAC to provide a letter of support for the proposal to Defra by 13th July 2020

4. Discussion on the 25 Year Environment Plan progress report (April 2019 – March 2020) and development of an HSAC response

- 4.1 The committee fed back their considerations on the 25 Year Environment Plan (YEP) progress report for the year 2019-20.
- 4.2 There have been improvements in air pollution and air quality. Assessing which interventions created these positive changes, and which ones require further funding, will allow a longer term plan to be created. Adding a short section into the report on the capacity to monitor change will increase confidence in the information.
- 4.3 The committee considered it useful to have a 25 YEP plan progress report. They expressed interested in hearing a short update on the forward plan for the 25 YEP and its implementation, including how the UK may take on functions once held by the EU and what the new arrangements will be for chemicals. For chemicals, it was considered unclear what future environment the 25 YEP is aiming to reach from a chemicals perspective and what actions will be taken by Defra if the state of the environment is not improving over the 25 YEP period.
- 4.4 The committee asked what are acceptable levels of improvement and how the annual reports will include views from both national and local perspectives.
- 4.5 The committee expressed interest in what the next report would like look after Covid-19 and how factors such as the impact in waste of single use plastic from PPE would be included.
- 4.6 It was highlighted that the chemical section deals with exposure and mentions only a few headline chemicals (PCBs and mercury) and instead should encompass a more holistic documentation of chemicals of interest.
- 4.7 Lorraine Hutt (EA) responded to the committee indicating that EA has developed a system to identify chemicals of concern and to sift and screen them in a Prioritisation

and Early Warning System. EA will focus on their own data and the top 50 substances in surface water to create a robust system.

4.8 It was suggested to have an update on the chemical regulation process at the next HSAC meeting, which will be incorporated into the next agenda.

4.9 Gintare Masiulyte (Defra) provided an update on the Chemical Strategy and their consideration of new timelines considering green recovery.

4.10 Caroline Nicholls (Defra) provided an update on the National Action Plan (NAP) for the Sustainable Use of Pesticides, looking at policy area challenges by developing policies that encourage crop protection.

4.11 Elen Strale (Defra) provided an update on engagement and negotiation in the UN Beyond 2020 Framework for Chemicals and Waste which is currently looking at available data to identify emerging issues for the Global Framework.

Action: The Secretariat agreed to organise an update to the committee on chemical regulation and the Environment Bill in the UK at the 27th meeting in Autumn.

5. Update from Expert Committee on Pesticides (ECP)

5.1 Bill Cushley (ECP) provided an update on the activities of the ECP who aim to ensure society benefits from the use of pesticides but not at the price of human and environmental health. ECP discuss the science of pesticides but its role is changing and is now more involved in regulatory decision making, prompted by EU Exit.

5.2 Nominated HSAC members will attend an upcoming ECP meeting as both committees are discussing the H4 indicators and there are likely collaborative opportunities to be explored.

Action: The Secretariat and an HSAC committee member will attend the ECP meeting on 14th July 2020 and consider opportunities for collaborative work.

6. H4 Outcome Indicator to Support the 25 Year Environment Plan

6.1 Lindsey Sturdy (EA) provided a background and overview of the outcome indicator framework for the 25 YEP. These include the H4 Indicator for chemicals in the environment which is under development.

6.2 The committee was asked to review the H4 indicator framework outlined in the UK Centre for Ecology and Hydrology (UKCEH) report '*Development of a dashboard*

approach for the H4 indicator: exposure and adverse effects of chemicals on wildlife in the environment’.

- 6.3 The committee was asked to consider the following questions:
- What practical steps can be taken to report on chemical exposure in the next 25 YEP annual progress report based on available data?
 - What specific critical recommendations does HSAC have for the longer-term development of the indicator to make it as robust as possible, including consideration of adverse effects?
- 6.4 The committee supported the use of the dashboard approach for the indicators.
- 6.5 The committee questioned if there is any information with regards to confidence statements since dashboards allow for interpretation. It was also questioned how to factor the interpretation if exposure changes, how to assess changes in chemical and how to relate that back to a source issue vs an intervention issue. It was suggested that monitoring data be added to enhance data on exposure.
- 6.6 The committee raised the issue of data gaps in the dashboard and raised concern about the lack of data on adverse effects on wildlife within the monitoring framework which they felt must be taken into account moving forward.
- 6.7 There is a need to review broader chemicals in the terrestrial environment within the dashboard which could address adverse effects in wildlife caused by chemical exposure. It was felt that historical samples that have been archived could be used to conduct retrospective data analysis to look at longer term trends.
- 6.8 It was agreed that the dashboard should use a suite of biomarkers which will give a likelihood of effects of chemicals in populations. This could lead to including a ‘biological effects’ component within the dashboard and integrate the effects of multiple chemicals and mixtures.
- 6.9 It was queried how sensitive the dashboard was as well as the need to ensure that information gets disseminated by considering other ways of drawing attention other than just publication.
- 6.10 The committee provided a series of recommendations on the H4 Indicator.
- Data on invertebrate species beyond the blue mussel should be included
 - Biological effects-based indicators should be incorporated
 - The mixture toxicity issue should be considered.
 - The dashboard could include trend analysis
 - How to use archived historical samples within the dashboard should be considered.
 - R&D should be conducted to consider innovative ways of collecting tissue samples from living organisms to allow data collection to be non-randomised and distributed across England to supplement existing opportunistic data collection (such as from top predators from stranding’s and road kill).

Annex A

List of attendees:

HSAC Members

Professor Christopher Collins (Chair)

Professor Michael Depledge

Professor John Sumpter

Professor Andrew Johnson

Professor Susan Owens

Professor Gary Hutchison

Professor Peter Matthiessen

Professor Tamara Galloway

HSAC Secretariat

Chris Green Defra – Chemicals, Pesticides and Hazardous Waste Team

Fatima Nasser Defra – Chemicals, Pesticides and Hazardous Waste Team

Robert Jones Defra – Chemicals, Pesticides and Hazardous Waste Team

Officials

Elen Strale Defra – Chemicals, Pesticides and Hazardous Waste Team

Ruth Coward Defra – Chemicals, Pesticides and Hazardous Waste Team

Gintare Masiulyte Defra – Chemicals, Pesticides and Hazardous Waste Team

Kay Williams Defra – Chemicals, Pesticides and Hazardous Waste Team

Caroline Nicholls Defra – Chemicals, Pesticides and Hazardous Waste Team

Alexander Agnew Defra – Chemicals, Pesticides and Hazardous Waste Team

Tabitha Tossell Defra – Chemicals, Pesticides and Hazardous Waste Team

Kasia Nikraszewicz Defra – Convention on Biological Diversity Negotiations Team

Lindsey Sturdy Environment Agency

Nick Cartwright Environment Agency

Lorraine Hutt Environment Agency

Liz Gibson Environment Agency

Rachel Merrick HSE – Expert Committee on Pesticides Secretariat

Grant Stark HSE – Expert Committee on Pesticides Secretariat

Jason Sharpe Scottish Government

Janet Sheridan DAERA

Caroline Barry as above

Ovnair Sepai Public Health England

Observers

Tessa Edgecombe	UKRI-NERC
Camilla Alexander-White	Royal Society of Chemistry
Bill Cushley	Chair of the Expert Committee on Pesticides, University of Glasgow
Tom Hutchinson	Expert Committee on Pesticides, University of Plymouth
Mark Dempsey	Expert Committee on Pesticides
Richard Shore	Centre for Ecology and Hydrology